



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

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*SR*

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/097,023 06/12/98 MCFADDEN

MORRIS & FOERSTER  
755 PAGE MILL ROAD  
PALO ALTO CA 94304

QM12/0925

J EXAMINER 252021800

ART UNIT	PAPER NUMBER
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THOMPSON, M *20*

DATE MAILED:  
3/63

09/25/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

**Office Action Summary**

Application No.

09/097,023

Applicant(s)

MCFADDEN ET AL.

Examiner

Michael M. Thompson

Art Unit

3763

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 July 2001.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15, 17-22, 24-42, 44-48 and 50-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15, 17-22, 24-42, 44-48, 50-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \*   c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 6, 13, 18-21, 24, 27, 31, 34, 40, 45-48, 50, 51, and 53-60 are rejected under 35 U.S.C. 102(b) as being anticipated by Cornelius et al., U.S. Patent 5,338,295. Cornelius et al. discloses a catheter (10) comprising an elongated tubular member (12) having a proximal end, distal end, and a passageway defining a lumen (28) extending between the proximal and distal ends, said elongate tubular member comprising a braid (52) and an inner tubular liner (24) in coaxial relationship with the knit tubular member. Cornelius et al. discloses the braid, which is woven in a “clothing weave” (column2, lines 29-32). Webster’s Ninth New Collegiate Dictionary defines weave: to form by interlacing strands. Webster’s defines knit: to from by interlacing in a series of connected loops with needles. Therefore, a weaved braid is the same as a knit. Cornelius et al. further discloses and outer cover (22); a braided tubular member formed from metal wire (col. 2, lines 29-30); a relatively stiff proximal segment and relatively flexible distal segment (col. 3, lines 51-53); a knit tubular member comprised of a metal alloy/stainless steel (col2, line 29) having a generally circular cross-sectional shape (col. 2, line 31); wherein at least one of the inner tubular liner and the outer tubular cover are radiopaque (36); a knit tubular member that is generally not radially expandable; an inner proximal liner (24) and an outer

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proximal cover(26); a braid interposed between the inner proximal liner and the outer proximal cover (fig. 2); a knit tubular member extending into the proximal segment (fig. 2).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 3-5, 7-9, 14-15, 17, 22, 25-26, 32, 33, 35-37, 41, 42, 44, and 52 rejected under 35 U.S.C. 103(a) as being unpatentable over Cornelius et al., in view of Samson, U.S. Patent 5,702,373. Cornelius teaches all of the limitations of the claims with the exception of a knit tubular member comprised of super elastic alloy, nickel-titanium alloy, nitinol, platinum alloy, non-metallic material, or polymeric material; wherein the wire has a diameter of about 0.3 mil-1.5 mil.; comprising a first strand made from a first material and a second made from a second material; an outer tubular cover comprised of a material selected from the group consisting of

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polyimide, polyamide, polyethylene, polypropylene, polyvinyl chloride, fluoropolymers including PTFE, FEP, Nylon, polyether block amide, vinylidene fluoride, and their mixtures, alloys, copolymers, and block copolymers; an inner tubular liner comprised of a material selected from the group consisting of polyethylene, fluoropolymer, Nylon, polyether block amide, (PVC), ethyl vinyl acetate (EVA), polyethylene terephthalate (PET), and their mixtures, alloys, and copolymers; and a coil interposed between the inner proximal liner and the outer proximal cover. Samson discloses a knit tubular member comprising of super elastic alloy (col. 7, line 64), nickel-titanium alloy (col. 8, lines 10-12), nitinol (col. 8, lines 10-12), platinum alloy (col. 12, lines 10-12); wherein the wire has a diameter of about 0.3 mil- 1.5 mil (col. 11, lines 60-62); comprising a first strand made from a first material and a second made from a second material; an outer tubular cover comprised of polyethylene (col. 10, line 36), polyvinyl chloride (col. 10, line 49); and an inner tubular liner comprised of polyethylene (col. 10, line 27), PVC (col. 10, line 27), EVA (col. 10, line 28), PET (col. 10, line 28); and a coil (282) interposed between the inner proximal liner and the outer proximal cover. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the device of Cornelius with the materials and dimensions of Samson to help prevent such features as kinking of the catheter tube.

6. Claims 10-12, 28-30, and 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cornelius et al. in view of Samson ('373) as applied to claims 3-5, 7-9, 14-15, 17, 22, 25-27, 32-37, 41-42, and 44 above, and further in view of Samson et al., U.S. Patent 5,549,109. Cornelius et al. in view of Samson ('373) teaches all of the elements of Applicant's claims with the exception of a knit tubular member comprised of a multi-filament wire. Samson

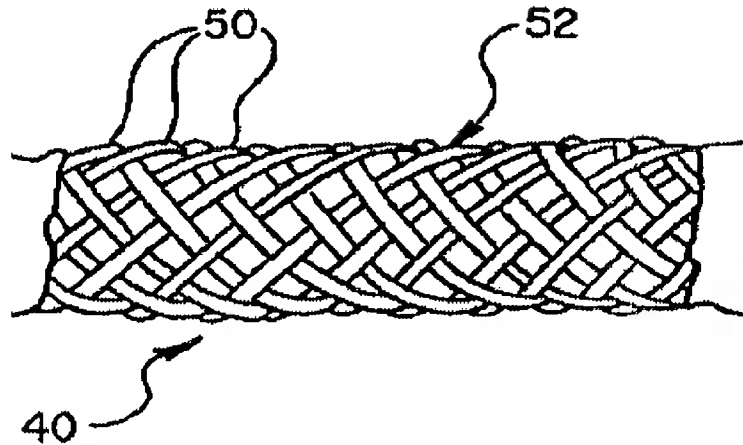
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et al. ('109) discloses multi-filament tubes (302) that are woven (col. 9, lines 65-67). It would have been obvious to one having ordinary skill in the art to modify the modified catheter of Cornelius et al. and Samson ('373) to use a multi-filament wire as taught by Samson ('109) to improve kinking resistance. Samson discloses the use of stainless steel, platinum, and nitinol as the material for the multi-filament wire to improve kinking resistance.

***Response to Arguments***

7. Applicant's arguments filed 07/12/01 have been fully considered but they are not persuasive. Applicant's arguments are primarily directed to the Rejections under 35 U.S.C. 102(b) and independent claims 1, 24, and 31. Applicant's entire argument rests on the difference between a "weave" and a "knit". Applicant primarily argues that, "Interlacing strands cannot be the equivalent of interlacing in a series of connected loops because in a knit, individually formed loops are connected together.....whereas in a weave, no such loops exist." While the Examiner still contends that given the multiple definitions given to the word "knit" that the interpretation of a braid or weave may still read on a knitted structure one might still focus on the series of connected loops. When looking at the braided, weaved, or knitted structure in Figure 2, one might notice the loop structure that occurs with any given strand within the weave.

**Fig. 2**



In fact, connected looping does occur in the braid pattern above if one considers the orientation of the loop. Notice the strand that is touched by reference number 52. Follow that strand down toward the region where reference number 40 is located. This provides one view of the side of the loop of a given strand. If you can then imagine following the same strand around the tubular device to the other side, in fact a loop structure has been made. Furthermore the examiner would contend that this looping occurs continually as the strand moves longitudinally. In much the same fashion, each of the remaining strands also loop around the device and are in series each "connected" to each other inasmuch as connection can be loosely defined. In either event, Applicant only uses the word "knit" in the claims and doesn't necessarily define or state such loops and their relationships, orientations, or structural connectivity.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

#### Contacts

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Michael Thompson whose telephone number is (703) 305-1619. The Examiner can normally be reached on Monday through Friday from 9 am to 5 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Primary, AnhTuan Nguyen, can be reached on (703) 308-2154. The fax phone number for the organization where this application or proceeding is assigned is (703) 306-4520.

Michael M. Thompson

Patent Examiner

*ANHTUAN T. NGUYEN*  
**ANHTUAN T. NGUYEN**  
**PRIMARY EXAMINER**  
*9/24/01.*

MT

September 20, 2001